

The cost, C , in dollars to print n leaflets is given by the formula
 $C = 35 + 0.03n$.



What is the cost of printing 900 leaflets?

- a \$27.00
- b \$35.00
- c \$37.70
- d \$62.00

Solution: Click below!

Solution: d

$$\begin{aligned} C &= 35 + 0.03 \\ &= 35 + 0.03(900) \\ &= 35 + 27 \\ &= 62 \end{aligned}$$

Feb 20-2:07 PM

Identical bottles are packed in a box. The box will hold a maximum of 38 bottles. The relationship between M , the total mass of the box and its contents, and n , the number of bottles in the box, is represented by the equation
 $M = 500n + 800$.

Solution: Click below!

Which of the following are possible integer values for the variable n ?

- a n is greater than 37.
- b n is greater than or equal to 0.
- c n is greater than 0 but less than 39.
- d n is greater than or equal to 0 but less than 39.

Solution: d
 n is the number of bottles and the box can hold a maximum of 38. It is also possible to have any empty box, meaning 0 bottles.

Feb 20-2:25 PM

Nadia lives 11.4 km from school and rides her bike to school every day.

The equation $d = 11.4 - 0.6t$ represents the relationship between d , her distance from school in km, and t , her time spent travelling in minutes.

If she leaves home at 8:05 a.m., what time will she get to school?

Solution: Click below!

- a 8:11 a.m.
- b 8:16 a.m.
- c 8:17 a.m.
- d 8:24 a.m.

Solution: d
 $d = 0$ when she arrives at school.
 Substitute $d = 0$ into the equation and solve for t , time.
 $0 = 11.4 - 0.6t$
 $0 + 0.6t = 11.4 - 0.6t + 0.6t$
 $0.6t = 11.4$
 $0.6 \quad 0.6$
 $t = 19$
 It takes her 19 minutes to get to school so she will arrive at 8:24 a.m.

Feb 20-2:10 PM

The student council sells lollipops for 10¢ each. They pay 4¢ for each lollipop and spend \$10 to advertise the sale.



- a $P = 0.06n - 10$
- b $P = 0.06n + 10$
- c $P = 10n + 0.06$
- d $P = 10 + 0.04n$

Solution: Click below!

Solution: a

P represents the student council's profit, in dollars, and n represents the number of lollipops sold.

Revenue is the amount of money earned from sales of a product.

Profit = total revenue - total expenses

Which **equation** represents the profit?

Feb 20-2:13 PM

Theo plans to purchase a new long-distance telephone plan called the Silver Plan. Under this plan, the telephone company determines the monthly cost using the following charges.

- The base fee is \$30/month, which includes up to 150 minutes of long distance.
- The cost for all minutes over 150 each month is \$0.15/minute.

Solution: Click below!

With the Silver Plan, how much will it cost Theo to talk long-distance for 230 minutes over one month?

- F \$12.00
- G \$34.50
- H \$42.00
- J \$64.50

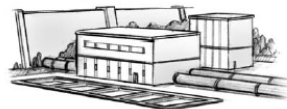
Solution: H

Let n be the number of minutes above 150
 Let C be the total cost
 $C = 0.15n + 30$
 $= 0.15(230 - 150) + 30$
 $= 0.15(80) + 30$
 $= 12 + 30$
 $= 42$

Feb 20-2:13 PM

The charges on a monthly water bill are \$0.86 per m^3 of water used plus a service charge of \$4.49.

Let C = total charge, in dollars, and
 w = total amount of water used, in m^3 .



Solution: Click below!

Which equation represents the relationship between C and w ?

Solution: H

- F $C = 4.49 \times 0.86w$
- G $C = 4.49w + 0.86$
- H $C = 4.49 + 0.86w$
- J $C = (4.49 + 0.86)w$

Feb 20-2:16 PM

Which value of x satisfies the equation $5 - 2x = 9$?


F $x = -7$

G $x = -2$

H $x = 2$

J $x = 3$

Solution: Click below!




Feb 20-2:19 PM

Temira needs to rent a car. She considers the following price equations, where C is the total cost, in dollars, and n is the number of days.

Company	Equation
Rentway	$C = 20n + 100$
Cheapie's Rentals	$C = 25n + 50$
Cars Cars Cars	$C = 50n$
Drive Away	$C = 15n + 125$

Solution: Click below!



Which company should she choose if she is planning to rent the car for at least 10 days?

F Rentway

G Cheapie's Rentals

H Cars Cars Cars

J Drive Away

Feb 20-2:21 PM

Alex's Rose Shop makes up bouquets and charges for the vase, plus a cost per rose.

- The shop charges \$32.85 for a bouquet of 12 roses.
- The shop charges \$50.85 for a bouquet of 20 roses.

What does Alex's Rose Shop charge for a vase?


A \$18.00

B \$8.00

C \$5.85

D \$2.74

Solution: Click below!



Feb 20-2:16 PM